

Prism Solar Technologies, Inc.



Advanced Solar Electric Modules

November 2005
The 18th NREL Industry Growth Forum

Rick Lewandowski

President – CEO

rick.lewandowski@att.net

Tel: 845-687-2406



Prism Solar Technologies, Inc.



Manufacturer of Advanced Holographic Solar Modules

- *New optics technology that significantly **reduces the amount of silicon solar cells** required in a PV module!*
- *Resulting in **lower price per watt** and higher efficiency cells.*

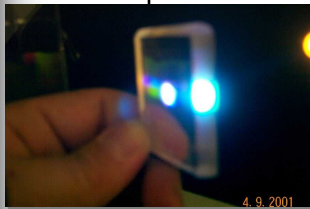


Prism Solar Technologies, Inc

Company Background



1992



Early hologram development

1995



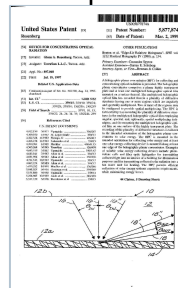
TerraSun Formed

1997



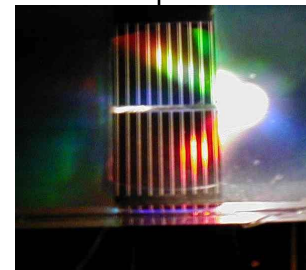
First focusing planar concentrator

1999



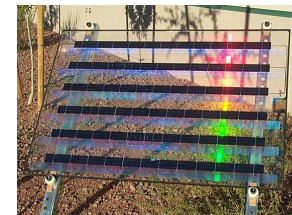
First patent issued

2000



First spatially multiplexed design

2001



First commercial prototypes

2005

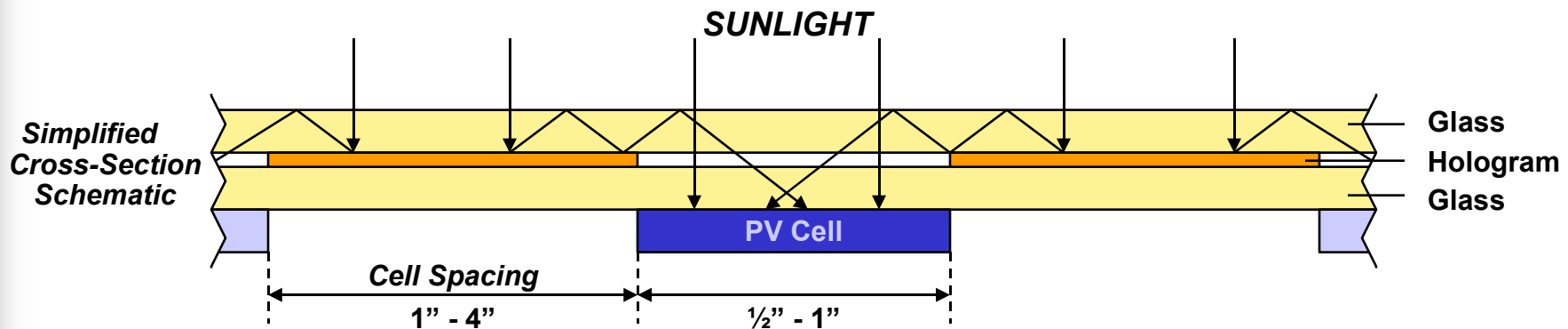


Prism Solar Founded

The holographic technology has progressed steadily from concept through R&D, to the first commercial PV module.



Prism Solar's holograms spectrally select sunlight and moves it through the plane of the glass onto the PV cells.



Our core technology is based on Holographic Planar Concentrator (HPC). The module utilizes a two-stage optical concentrator and a silicon solar cell receiver. The holograms are interspersed between the rows of solar cells to collect and concentrate sunlight.

Prism's Competitive Advantage

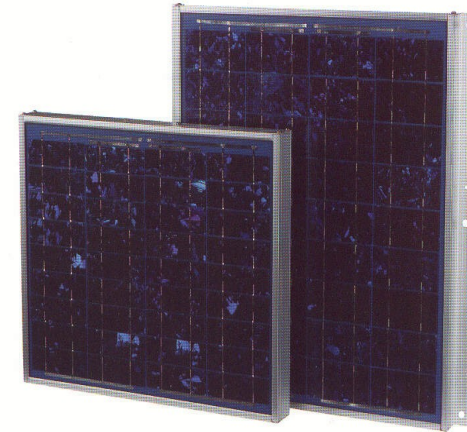


Prism 25w PV Module



- Lower cost solar modules (\$1-2/watt)
 - 50-85% less solar cells.
- Planar concentrator
 - Intelligent - Passive “tracking” – (no moving parts).
- Stability of single crystal with the (promised) cost of thin films.

Competitor 20w & 30w PV Modules



- Expensive modules (\$3.20/watt)
 - Serious silicon shortage to continue.
- Traditional concentrators
 - Requires extensive cooling and expensive/precise mechanical tracking.
- Thin films have not met cost projections over two decades and crystalline remain costly and an inefficient use of silicon.

PRISM has patent protection and has tested its product at well known institutions using recognized standards.



Intellectual Property

- Issued patents
 - US Patent Nos.
#5,877,874 and #6,274,860.
- Additional patents under development
- International counterparts
- A substantial body of **trade secrets** and **process know-how** has been developed and documented
- Can be configured to meet architectural glazing test standards for BIPV

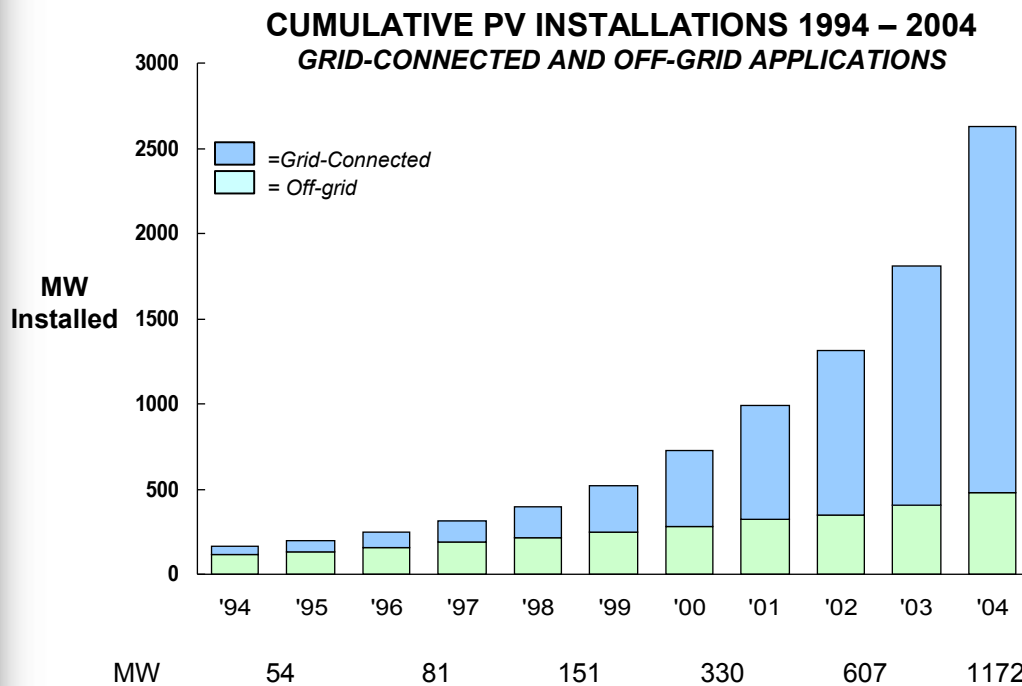
Testing and Verification

- Tested at the U.S. Department of Energy national lab
 - National Renewable Energy Laboratory
- Tested at Arizona State University Photovoltaic Test Lab (PTL)
- Withstands rigors of IEEE-1262 PV test standards
- Modules installed and field-tested at numerous sites around the US and Japan.



PV Markets

2004 PV PRODUCTION TOPS 1100 MW



Sources: IEA PVPS

Total installed PV Power – 2.6 GW

Business Model

PST Product

Role-out

- OEM
 - 9-12 months
- BIPV
 - 18-24 months
- Power Modules
 - 36-48+ months

\$7.5 Billion Market - Last year's growth = 54%



Prism Management Team

❖ **Rick Lewandowski**

- President and Chief Executive Officer, BOD
 - 24-year veteran of solar industry
 - Founder of Major US PV distributor, NYSEIA, ILSEIA
 - Founder – Direct Global Power, Inc.

❖ **George Mignon**

- Chief Operations Officer, BOD
 - Former founder of technology developer
 - Manufacturing Process Development

❖ **Dr. Chien-Wei Han**

- Chief Optical Scientist
 - Inventor

❖ **Mark Ranalli**

- Director – Business Development

➤ **Dr. Walter Robb - BOD**

- Former Senior VP and head of GE's Research & Development

➤ **Paul Maycock - BOD**

- Former head of USDOE PV program

Our team has a proven track record in market and business development, manufacturing and R&D in start-ups and critical experience in bringing new products to market.

Prism Solar - Financials



Under current financial projections, Net Income is expected to break even in Year 3

Metric ¹	2006	2007	2008	2009	2010
Revenues	.80	2.8	8.2	20.4	47.9
Gross Margin as (%) of sales	78%	56%	44%	42%	41%
EBITDA	(1.0)	(.5)	.28	3.5	12.1
Net Income	(1.1)	(.6)	.01	2.5	6.7
CAPEX	.6	.4	1.2	1.4	4.5
Annual Cash Flow²	(1.7)	(1.2)	(1.9)	(.37)	(.63)
Investments	2	1	3	-	-

1. Million U.S. Dollars
2. Net Cash flow before financing

Prism Solar - Investment Opportunity



- **Market**

- \$7.5 Billion Market - industry that grew over 50% last year, 30%/year - last 10 years
- **Direct sales force** cultivating US and international distributors and key accounts
- Major partners/customers ready for Prism's products

- **Proprietary Technology & Competitive Advantage**

- **Two Patents – Worldwide exclusive license**, trade secrets, next generation technology in development
- Advanced high speed laser - holographic (continuous process) replicator
- Holographic modeling software and an extensive holographic mastering capability
- **Reduced silicon** requirement in module resulting in **lower cost-per-watt**.

- **Investment Needs**

- **\$3 million Series “A”**, \$3 million Series “B” in year three.
- **\$400,000 raised to date, additional \$500,000 pending.**
- Use of Proceeds:
65% Working Capital, 15% CAPEX, 20% Marketing & R&D.

- **Good Return On Investment & Fair Valuation**

- \$5.5 million Pre-cash valuation

- Returns and valuation assume a sale at six times EBITDA in the fifth year, reflecting a reasonable multiple for a strategic acquisition of a growing business in a growing market.

Prism Solar Technologies, Inc.

PO Box 630 Stone Ridge, NY 12484

Email: Rick.Lewandowski@att.net

Tel: 845-687-2406



Thank You